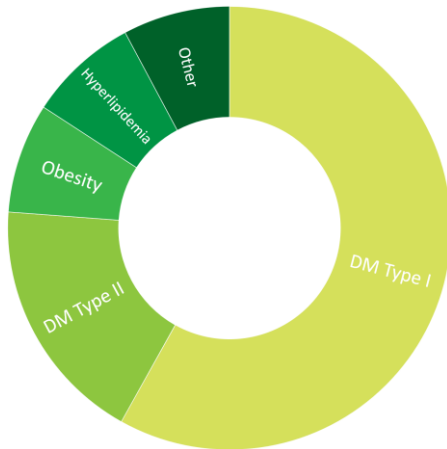


Metabolic Diseases

Clinical Trial Solutions in Europe

Pharmnet expertise

Pharmnet has significant expertise in the field of metabolic diseases having conducted more than 40 trials. We have most experience in clinical trials of various phases on diabetes mellitus (DM) and dyslipidaemia.



Other: Hypercalcemia, Chronic kidney disease (CKD)

Why conduct a clinical trial with us?

We can offer knowledge of healthcare facilities, treatment strategies in European countries, and site allocation based on our years of experience working in the metabolic field. Having an active part-time endocrinologist/diabetologist on our team provides us with good community access via ongoing interactions with Key Opinion Leaders. We offer the benefit of long-term cooperation with clinical centres, local authorities, and experience in effective patient recruitment for clinical trials.

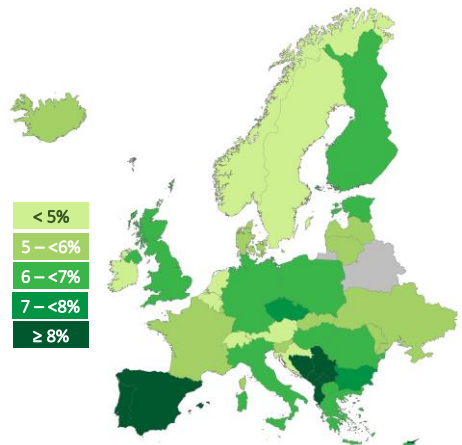
We take the diagnosis-oriented approach when doing top-line feasibility for selected countries of interest. The executive summary results for a specific pathology/protocol and proposed scenarios assists our clients in selecting the best study solution in terms of study speed and cost.

Key figures in diabetes mellitus in Europe

The prevalence of diabetes was estimated to be approximately 9.2% in 2021, accounting for roughly 61 million people with diabetes mellitus (DM) in the region combining Europe and the Russian Federation (EUR). By 2045, the prevalence is expected to climb by 13%. EUR region has the highest incidence of Type 1 diabetes annually, with 31,000 new cases per year.

Type 2 diabetes is largely preventable. Several risk factors, such as overweight and obesity, nutrition, and physical inactivity, are modifiable through effective preventive strategies and lifestyle changes.

Prevalence of diabetes in Europe:



Age-adjusted comparative prevalence (%) of diabetes (20–79 years) in Europe in 2021. <https://www.ncbi.nlm.nih.gov/books/NBK581937/>

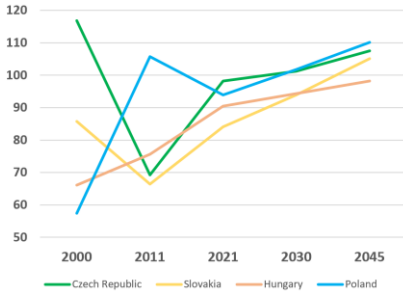
Key figures for DM in Central Europe

Around 850 000 people (9% of the population) are being treated for diabetes in the Czech Republic. Type I diabetes has been diagnosed in roughly 60,000 of these people. Diabetes was a cause of mortality in over 2,000 cases. The DM figures in the other Central European countries are very similar.

Metabolic Diseases

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People with DM in Central Europe per 1,000 people:



Diabetes estimates, 2000 – 2045, Both sexes, ages 20-79
Source: IDF Diabetes Atlas, 10th Edition 2021

The majority of diabetic patients (over 80%) are treated at diabetologist out-patient clinics, about 17% being followed up on by a general practitioner. For patients who have deteriorated glycemetic control on first therapy with lifestyle intervention and metformin, the therapeutic choices are to add a second oral or injectable drug, including the addition of insulin, or to transition to insulin. The choice of a second drug for individuals with persistent hyperglycemia while taking metformin is customized based on efficacy, risk of hypoglycemia, the patient's comorbid diseases, impact on weight, side effects, and cost.

Key figures in Dyslipidaemia in Europe

Dyslipidaemias, notably elevated plasma LDL cholesterol levels, are substantial risk factors for cardiovascular disease; however, some variants, such as hypertriglyceridemia, are linked to serious disorders in other organ systems, such as non-alcoholic fatty liver disease and acute pancreatitis. With 54% for both men and women, Europe has the highest prevalence of high cholesterol in the world. Dyslipidaemias can be hereditary or secondary to other illnesses such as diabetes, obesity, or an unhealthy lifestyle. Hypercholesterolaemia is the most frequent kind of dyslipidaemia and is linked to

an increased risk of cardiovascular disease, with raised plasma LDL-cholesterol levels being the eighth leading cause of death in 2019.

Most patients (over 80%) are treated at the cardiologist's out-patient clinics, with others being followed up on by a general practitioner. In addition to a healthy lifestyle, treatments that target causative lipoproteins are available. While statins are the first choice in pharmacotherapy, combined therapy with ezetimibe and PCSK9 monoclonal antibodies has been found to improve cardiovascular outcomes in high-risk patients. Fibrates have been demonstrated to lower residual risk in people with high triglyceride levels and low HDL.

Key figures in Obesity in Europe

Obesity (BMI>30) is a growing public health concern that affects up to 2.1 billion people worldwide. Overweight and obesity afflict about 60% of adults and one-third of children in Europe. It is also the primary cause of disability and one of the major risk factors for several noncommunicable diseases, including cardiovascular disease, 13 types of cancer, and diabetes. Overweight and obesity are estimated to cause more than 1.2 million deaths in Europe each year.

Overweight population (BMI≥25):

% of adult population, 2019

